

Work Task D6:	Monitoring Avian Productivity and Survivorship (MAPS)
Partners:	U.S. Fish and Wildlife Service (FWS) Havasu National Wildlife Refuge Cibola National Wildlife Refuge Bureau of Reclamation (Reclamation)
Point of Contact:	John Swett, LC-2320 (702) 293-8574
Purpose:	Monitor breeding bird long-term population trends and use of different habitat types along the Colorado River using the MAPS protocol.
Conservation Measures:	MRM1 and MRM2
Long-term Goal:	The Cibola Nature Trail MAPS station will be run through at least 2006. The Havasu South Dike station will be run through at least 2009. Additional MAPS stations will be established to monitor long-term trends along the LCR, as a whole, and to evaluate riparian restoration sites as they occur throughout the LCR MSCP project period.
FY05 Estimate:	Each MAPS station is run 10 times between the beginning of May and the beginning of August. Costs estimates are for Reclamation staff time, travel expenses, and equipment. Monitoring both sites is expected to total approximately \$300,000 in FY05.
Project Description:	<p>MAPS monitors avian populations, using a standardized protocol, throughout the U.S., Canada, and Mexico. Long-term population trend data is collected by conducting intensive banding throughout the breeding season. Data collected are analyzed by the Institute for Bird Populations and long-term population trends are determined on a regional and continental level. In addition, site specific use can be derived from MAPS data after five years of continuous data collection.</p> <p>In 2002, Reclamation established a MAPS station at Cibola National Wildlife Refuge within the Nature Trail Riparian Restoration Demonstration site. In addition, a MAPS station was run for five years on Colorado River Indian Tribe (CRIT) lands, near Headgate Rock Dam (2000-04), in mixed native and exotic habitat. In 2005, the CRIT station will no longer be operational; however, a new MAPS station will be established on Havasu National Wildlife Refuge, near South Dike. The Havasu site will provide data from a different reach of the LCR, in mixed cottonwood and salt cedar habitats.</p>

**Accomplishments
to date:**

The Cibola Nature Trail MAPS site has been conducted for three years. Data has been collected, entered into a database, and delivered to the Institute for Bird Populations.